

Notice of Allowability

Application No.

10/672,740

Examiner

An H. Do

Applicant(s)

IMAI ET AL.

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 08 December 2005.
2. ☒ The allowed claim(s) is/are 9-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

An H. Do
(AN H. DO)

DETAILED ACTION

The Amendment filed on 08 December 2005 has been acknowledged.

Election/Restrictions

1. Claim 9 is generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims, directed to the species of Figures 13A-18 are no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Allowable Subject Matter

2. Claims 9-30 are allowed.
3. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 9-13 and 26 is the inclusion of the limitation of a printed circuit board for being connected with an inkjet head that includes a plurality of lands being arranged on the insulating member at locations in one-to-one

correspondence with a plurality of head terminals provided on the inkjet head, the insulating member being formed with a plurality of through-holes each for exposing a portion of a corresponding land, the lands facing through the through-holes to the head terminals on the inkjet head, the through-hole on each land receiving a conductive brazing material placed therein, the conductive brazing material being melted to connect and fix each land to the corresponding head terminal. It is this limitation found in the claims, as it is claimed in the combination of, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 14-19, 27 and 28 is the inclusion of the limitation of a connecting structure of a flexible printed circuit board for connecting an inkjet head to a circuit board that includes a flexible belt-shaped insulating member having one surface and another surface opposite to each other, the one surface confronting the surface of the inkjet head on which the plurality of head terminals is provided; a plurality of lands being arranged on the insulating member at locations in one-to-one correspondence with a plurality of head terminals provided on the inkjet head, the insulating member being formed with a plurality of through-holes each for exposing a portion of a corresponding land, the lands facing through the through-holes to the head terminals on the inkjet head, the through-hole on each land receiving a conductive brazing material placed therein, the conductive brazing material being melted to connect and fix each land to the corresponding head terminal. It is this limitation found in the claims, as it is claimed in the combination of, that has not been

found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 20-23, 29 and 30 is the inclusion of the limitation of an inkjet head unit that includes a plurality of the lands connected and fixed individually to respective ones of the plurality of head terminals by a conductive brazing material placed in the corresponding one of the plurality of through-holes. It is this limitation found in the claims, as it is claimed in the combination of, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 24 and 25 is the inclusion of the limitation of a printed circuit board for connecting an inkjet head to a control unit that includes a plurality of conductive lands formed on the second surface of the insulating substrate at positions corresponding to the plurality of head terminals on the inkjet head, a plurality of through-holes being formed through the insulating substrate at positions corresponding to the lands for exposing a portion of each of the plurality of lands on the first surface of the insulating substrate, the plurality of through-holes receiving a brazing material therein. It is this limitation found in the claims, as it is claimed in the combination of, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An H. Do whose telephone number is 571-272-2143. The examiner can normally be reached on Monday-Friday (Flexible).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD
January 20, 2006


An H. Do
Examiner
Art Unit 2853